Claims

WHAT IS CLAIMED IS:

1. In a computing system, a navigational interface for inputting text and control information into the computing system, the navigational interface comprising:

an input pointer generating a selection stroke when operated by the user, the selection stroke indicative of a request to enter text or to perform a task in the computing system;

a sensor pattern device divided into a plurality of sensory portions, the sensor pattern device detecting the selection stroke and identifying at least one selected sensory portion included in the selection stroke; and

a first information element associated with a task to be performed in the computing system and referenced by one of the plurality of sensory portions;

a second information element associated with text to be entered in the computing system and referenced by one of the plurality of sensory portions; and

at least one selected sensory portion selected by the selection stroke, whereby information entering text in the computing system and requesting performance of a particular task by the computing system is input by the selection stroke.

2. The navigational interface according to claim 1 further comprising:

an interface interpretation module recognizing the selection stroke on the sensor pattern and entering the text or performing the task associated with the selected information element.

3. The navigational interface according to claim 2 wherein the sensor pattern comprises:

a central sensory portion forming a single sensory portion;

a petals sensory portion angularly divided into sensory petals distributed about the central sensory portion, each sensory petal forming a single sensory portion; and

an outer sensory portion associated with the sensory petals so that circumferential parts of the outer sensory portion are associated with individual sensory petals.

4. The navigational interface of claim 3 further comprising:

a display pattern associated with the sensor pattern radially divided into a central display portion, a petals display portion, and an outer display portion, the display pattern presenting each information element.

5. The navigational interface of claim 3 wherein the selection stroke begins at the central sensory portion, continues to at least one sensory petal, and terminates at the central sensory portion whereby the information input into the computing system is text.

6. The navigational interface of claim **3** wherein the selection stroke begins and ends at the same sensory petal whereby the information input into the computing system is task information.

7. The navigational interface of claim **6** wherein the task information activates an application installed on the computing system.

8. The navigational interface of claim **3** wherein the selection stroke begins at a sensory petal and continues to at least one other sensory portion of the sensor pattern whereby the information input into the computing system is task information controlling operations in an application installed on the computing system.

9. The navigational interface of claim **8** wherein the other sensory portion is associated with a menu item of the application whereby the information input into the computing system defines a plurality of tasks of an updated set of information elements.

10. The navigational interface of claim **8** wherein the other sensory portion is the central sensory portion whereby the information input into the computing system is a drag task executing an operation of the application.

11. The navigational interface according to claim **3** wherein the interface interpretation module comprises:

a text-operating module activated when the selection stroke is initiated in the central sensory portion; and

a control-operating module activated when the selection stroke is initiated on a sensory portion other than the central sensory portion.

12. The navigational interface according to claim **8** wherein the selection stroke begins at a sensory portion other than the outer sensory portion and continues to the outer sensory portion whereby the information input into the computing system is a cancel task initializing the plurality of information elements to an immediate previous instance.

13. The navigational interface according to claim **3** wherein the sensor pattern device is a touchpad having a surface and the selection stroke comprises:

a press on a first selected sensory portion on the surface of the touchpad;

a slide from the first selected sensory portion to at least one other selected sensory portion; and

a lift from the surface of the touchpad whereby the selection stroke is indicative of a touch, slide, and lift, and the selection stroke includes at least two selected sensory portions, begins at the first selected sensory portion, and ends at the other selected sensory portion.

14. The navigational interface according to claim **3** wherein the sensor pattern device is a touchpad having a surface and the selection stroke comprises:

a press on a selected sensory portion on the surface of the touchpad; and

a lift from the surface of the touchpad at the same selected sensory portion whereby the selection stroke is indicative of a touch and lift at one selected sensory portion.

15. The navigational interface according to claim **3** wherein the input pointer is a mouse having at least one button for press and lift and the sensor pattern device is a display device.

16. In a computing system having a display, an operating system, and a graphical user interface, a navigational interface for inputting text elements and control elements into the computing system, the navigational interface comprising:

a sensor pattern radially divided into a central sensory portion, a petals sensory portion and an outer circumferential portion; the central sensory portion forming a single sensory portion; the petals sensory portion angularly divided into sensory petals distributed about the central sensory portion, each sensory petal forming a single sensory portion; the outer circumferential portion angularly divided into outer sensory segments;

the display associated with the sensor pattern and radially divided into a central display portion, a petals display portion and an outer circumferential display portion; the central display portion corresponding to the central sensory portion; the petals display portion angularly divided into display petals distributed about the central display portion, each display petal corresponding to a sensory petal; the outer circumferential display portion divided into outer display segments, each outer display segment corresponding to an outer sensory segment;

the text elements and control elements being associated with the central sensory portion, the sensory petals and the outer sensory segments, individually and in a plurality of combinations of the same; and

text elements and control elements being selected through a selection stroke applied to one or more of the central sensory portion, the sensory petals and the outer sensory segments whereby text elements and control elements are input into the computing system.

17. The navigational interface of claim **16** wherein the outer sensory segments are associated with the sensory petals and at least one application activation control element assigned to an outer sensory portion is selected by a selection stroke including an associated sensory petal.

18. The navigation interface of claim **17** further comprising:

at least one application operation control element being selected through a selection stroke, including at least one sensory petal and the central sensory portion.

19. The navigational interface of claim **16** further comprising:

a text elements being selected through a selection stroke beginning at the central sensory portion, continuing to at least one sensory petal, and terminating at the central sensory portion whereby text is input into the computing system.

20. The navigational interface of claim **16** wherein the selection stroke is a press and lift at the same outer sensory segment whereby the control element activates an application installed on the computing system.

21. The navigational interface of claim **20** wherein the application is an operating system utility of an operating system.

22. The navigational interface of claim **20** wherein the control stroke begins at a sensory petal and continues to at least one other sensory portion of the sensor pattern whereby the control element selected activates performance of a control operation task controlling operations in an activated application.

23. The navigational interface of claim **22** wherein the other sensory portion is a sensory petal associated with a menu item control element of the activated application and the menu item control element selected rotates the control elements of each sensory petal such that the menu item sensory petal defines a plurality of controls of an updated set of control elements.

24. The navigational interface of claim **22** wherein the other sensory portion is the central sensory portion and the control element selected executes an operation of the application.

25. In a computing system, a method for controlling operations of the computing system and inputting text into various applications installed on the computing system through a navigational interface having an input device, the method comprising the operations of:

receiving a selection stroke identifying a user request and generated from the input device, the selection stroke representing a task to be performed in the computing system; and

executing the task whereby control operation and textual input is applied once the selection stroke is received.

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26. The method according to claim **25** further comprising:

selecting at least one information element with the selection stroke to initiate execution of the particular task.

27. The method according to claim **26** wherein the act of selecting selects a plurality of information elements with the selection stroke to initiate execution of the particular task.

28. The method according to claim **26** further comprising:

following the act of executing, updating each information element to represent an updated task, each updated task defined by the particular task performed in the computing system.

29. The method according to claim **26** further comprising:

beginning the selection stroke on a sensory petal of a petal sensory portion of a sensor pattern of the navigational interface;

continuing the selection stroke to at least one other sensory petal of the petal sensory portion; and

terminating the selection stroke at the other sensory petal whereby the task performed is rotation of the information elements referenced by each sensory petal such that petal sensory portion is updated with an updated set of information elements defined by a menu item information element rotated to a primary active sensory petal.

30. The method according to claim **25** further comprising:

beginning the selection stroke on a central sensory portion of a sensor pattern of the navigational interface;

continuing the selection stroke to at least one sensory petal of a petal sensory portion of the sensor pattern; and

terminating the selection stroke at the central sensory portion whereby the task performed is text input into an application installed on the computing system.

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31. The method according to claim **25** further comprising:

beginning the selection stroke on a central sensory portion of a sensor pattern of the navigational interface;

continuing the selection stroke to a sensory petal of a petal sensory portion of the sensor pattern; and

terminating the selection stroke at the sensory petal whereby the task performed is execution of a control operation in the computing system.

32. The method according to claim **25** further comprising:

beginning the selection stroke on a sensory petal of a petal sensory portion of a sensor pattern of the navigational interface; and

terminating the selection stroke at the sensory petal whereby the task performed is activation of an application installed on the computing system.

33. The method according to claim **25** further comprising:

beginning the selection stroke on a sensory petal of a petal sensory portion of a sensor pattern of the navigational interface;

continuing the selection stroke to a central sensory portion of the sensor pattern; and

terminating the selection stroke at the central sensory portion whereby the task performed is performance of an operation in an application installed on the computing system.

34. The method according to claim **25** further comprising:

beginning the selection stroke on a sensory portion of a sensor pattern of the navigational interface;

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continuing the selection stroke to an outer sensory portion of the sensor pattern whereby the task performed is cancellation of the task associated with the user request.

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35. In a computing system having a display and an operating system, a method for controlling operations in the computing system and inputting text into various applications installed on the computing system through a navigational interface having an input device , a navigational display presented on the display, and an interface interpretation module, the method comprising the steps of:

detecting a selection stroke at the input device, the selection stroke requesting performance of a particular task in the computing system;

dividing a sensory portion into a plurality of sensory portions including a central sensory portion, a plurality of sensory petals, and an outer sensory portion, each sensory portion representing an information element associated with a task to be performed in the computing system;

interpreting the selection of at least one information element from a selection stroke on at least one sensory portion; and

executing an instruction, based on one or more information elements interpreted by the act of interpreting, to perform the particular task in the computing system whereby control operation and textual input are applied to the computing system.

36. The method according to claim **35** wherein the selection stroke:

begins on a sensory petal;

continues to at least one other sensory petal; and

terminates at the other sensory petal whereby the task performed is a dial task updating the information element referenced by at least one sensory portion.

37. The method according to claim **35** wherein the selection stroke:

begins on the central sensory portion;

continues to at least one sensory petal; and

terminates at the central sensory portion whereby the task performed is a textual task inputting text into the computing system.

38. The method according to claim **35** wherein the selection stroke:

begins on the central sensory portion;

continues to a sensory petal; and

terminates at the sensory petal whereby the task performed is a drag-out task performing a control operation in the computing system.

39. The method according to claim **35** wherein the selection stroke:

begins on a sensory petal; and

terminates at the sensory petal whereby the task performed is a press task activating an application installed on the computing system.

40. The method according to claim **39** wherein the application is one of the group consisting of a desktop environment, an operating system, and an application program.

41. The method according to claim **35** wherein the selection stroke:

begins on a sensory petal;

continues to the central sensory portion; and

terminates at the central sensory portion whereby the task performed is a drag-in task performing a control operation in the computing system.

42. The method according to claim **35** wherein the selection stroke:

begins on a sensory portion; and

continues to the outer sensory portion whereby the task performed is cancellation of the task identified in the selection stroke.

43. A computer program product readable by a computing system and encoding a computer program of instructions for executing a computer process for controlling operations of the computing system and inputting text into various applications installed on the computing system through a navigational interface having an input device, said computer process comprising:

receiving a selection stroke identifying a user request and generated from the input device, the selection stroke representing a task to be performed in the computing system; and

executing the task whereby control operation and textual input is applied once the selection stroke is received.

44. The computer process in the computer program product of claim **43** wherein the computer process for controlling operations of the computing system and inputting text into various applications installed on the computing system further comprises:

selecting at least one information element with the selection stroke to initiate execution of the particular task.

45. The computer process in the computer program product of claim **44** wherein the act of selecting selects a plurality of information elements with the selection stroke to initiate execution of the particular task.

46. The computer process in the computer program product of claim **44** wherein the computer process for controlling operations of the computing system and inputting text into various applications installed on the computing system further comprises:

following the act of executing, updating each information element to represent an updated task, each updated task defined by the particular task performed in the computing system.

47. The computer process in the computer program product of claim **44** wherein the computer process for controlling operations of the computing system and inputting text into various applications installed on the computing system further comprises:

beginning the selection stroke on a sensory petal of a petal sensory portion of a sensor pattern of the navigational interface;

continuing the selection stroke to at least one other sensory petal of the petal sensory portion; and

terminating the selection stroke at the other sensory petal whereby the task performed is rotation of the information elements referenced by each sensory petal such that petal sensory portion is updated with an updated set of information elements defined by a menu item information element rotated to a primary active sensory petal.

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48. The computer process in the computer program product of claim **43** wherein the computer process for controlling operations of the computing system and inputting text into various applications installed on the computing system further comprises:

beginning the selection stroke on a central sensory portion of a sensor pattern of the navigational interface;

continuing the selection stroke to at least one sensory petal of a petal sensory portion of the sensor pattern; and

terminating the selection stroke at the central sensory portion whereby the task performed is text input into an application installed on the computing system.

49. The computer process in the computer program product of claim **43** wherein the computer process for controlling operations of the computing system and inputting text into various applications installed on the computing system further comprises:

beginning the selection stroke on a central sensory portion of a sensor pattern of the navigational interface;

continuing the selection stroke to a sensory petal of a petal sensory portion of the sensor pattern; and

terminating the selection stroke at the sensory petal whereby the task performed is execution of a control operation in the computing system.

50. The computer process in the computer program product of claim **43** wherein the computer process for controlling operations of the computing system and inputting text into various applications installed on the computing system further comprises:

beginning the selection stroke on a sensory petal of a petal sensory portion of a sensor pattern of the navigational interface; and

terminating the selection stroke at the sensory petal whereby the task performed is activation of an application installed on the computing system.

51. The computer process in the computer program product of claim **43** wherein the computer process for controlling operations of the computing system and inputting text into various applications installed on the computing system further comprises:

beginning the selection stroke on a sensory petal of a petal sensory portion of a sensor pattern of the navigational interface;

continuing the selection stroke to a central sensory portion of the sensor pattern; and

terminating the selection stroke at the central sensory portion whereby the task performed is performance of an operation in an application installed on the computing system.

52. The computer process in the computer program product of claim **43** wherein the computer process for controlling operations of the computing system and inputting text into various applications installed on the computing system further comprises:

beginning the selection stroke on a sensory portion of a sensor pattern of the navigational interface;

continuing the selection stroke to an outer sensory portion of the sensor pattern whereby the task performed is cancellation of the task associated with the user request.